

WHAT IS CLAIMED IS:

1. A digital data receiving apparatus comprising:

a receiving portion for distributing a received same signal to two channels, and demodulating said received signals on said two channels to produce a plurality of data streams on each of said two channels; and

a switching portion for selectively producing said plurality of data streams of one of said two channels.

2. A digital data receiving apparatus according to claim 1, wherein said switching portion comprises:

memories for temporarily storing said plurality of data streams of each of said two channels at the clocks within the data streams of each of said two channels;

a data read control portion for controlling said memories to simultaneously read out said temporarily stored data streams of each of said two channels; and

a clock control portion for controlling clocks to be generated as a pair with said data streams that are selected by said switching portion and produced from said digital data receiving apparatus.

3. A digital data receiving apparatus according to claim 2, wherein said clock control portion of said switching portion comprises:

frequency dividers for generating clocks of $1/N$ (N is a positive number) the clock frequency of said data streams of each of said two channels;

a frequency-division synchronizer for synchronizing said frequency dividers;

a selector for selecting one of said clocks of $1/N$ the clock frequency of said data streams of each of said two channels from said frequency dividers; and

a multiplier for multiplying said selected clock of $1/N$ the clock frequency by N , and the output clock from said frequency-division synchronizer is the output clock from said clock control portion.

4. A digital data receiving apparatus according to claim 2, wherein the constant N of said frequency dividers and said multiplier in said clock control portion of said switching portion is any integer within a range of 4 ~ 8.

5. A digital data receiving method comprising the steps of:

a) distributing a received same signal to two channels;

b) demodulating said received signals on said two channels to produce a plurality of data streams on each of said two channels; and

c) selecting and producing said plurality of data streams of one of said two channels.

6. A digital data receiving method according to claim 5, wherein said step c) comprises the steps of:

temporarily storing said plurality of data streams of each of said two channels at the clocks within said data streams of each of said two channels;

simultaneously reading out said temporarily stored data streams of said two channels;

selectively producing said plurality of data streams of one of said two channels simultaneously read out as above; and

generating clocks as a pair with said produced data streams.